In order to verify if these cells are able to induce the same type of malignancy in rats, 4 million of these cells suspended in Hanks Salt solution were inoculated into every Wistar rat. The animals were anaesthetized with Midazolame and Ketamine, and surgical opening was made on the backside to their outer skin layer. The tissue underneath was traumatized by lancing with a sharp blade in order to bring fresh blood to the surface. Malignant cells were then aseptically infused into the operated area, closure of the open site was immediately performed. The animals developed medium-sized malignant tumors (approximately 12 cm^3 size) within the first 10 days after inoculation.

Smooth muscle cells (SMC) were also isolated from the aorta of Wistar rats and subcultured by the methods described above.

Equipments used: Radio - frequency measurements and static electromagnetic field exposure of cells were performed by a device called MULTI CHANNEL DYNAMIC EXITER 100 V1 (MCDE) invented by K. Havelas and collaborators. The MCDE has been certified by the International Committee of Atomic Energy (E.K.E.F.E DEMOKRITOS, Athens Greece) for its safe use in humans and animals. This device consists of two basic parts: a) a diagnostic part with an EPR spectrometer's characteristics and b) an electromagnetic field generator of various intensities(from 1,1 to 1,11 +/-0.01 V/m for the electric field and 0.0027 to 0.0029+/-0.00005 A/m for the magnetic field) and radio – frequencies (from 1kHz to 1MHz) conducted by a sophisticated software. To use this software, first it is necessary to record the biological target system's frequencies and then, by using a specific algorithm , to calculate the appropriate electromagnetic frequencies that are needed , for the exposure of living target systems or cells (submitted for patent) .